UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,325	09/16/2003	Anindya Datta	20700-0002	3790

7590   06/16/2006

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EXAMINER
AVELLINO, JOSEPH E

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/663,325	DATTA, ANINDYA
	Examiner	Art Unit	
	Joseph E. Avellino	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _06 September 2003_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _11-18 and 21-31_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _11-18 and 21-31_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _16 September 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. Claims 11-18 and 21-31 are presented for examination; claims 11, 21 and 26 independent. The Office acknowledges the preliminary amendment to cancel claims 1-10, 19, 20, and the addition of claims 21-31.

Priority

2. Applicant's claim of priority under 35 USC 120 is acknowledged.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites the limitation "the content element node comprises a nodeID, a NavProb, and a NextNode". It is unable to be determined from the scope of the claim as to what these three elements specifically are. For

examination purposes these elements will be considered a node identifier, content, and

a next node pointer. Correction is required.

Double Patenting

6.   The nonstatutory double patenting rejection is based on a judicially created
doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the
unjustified or improper timewise extension of the "right to exclude" granted by a patent
and to prevent possible harassment by multiple assignees. A nonstatutory
obviousness-type double patenting rejection is appropriate where the conflicting claims
are not identical, but at least one examined application claim is not patentably distinct
from the reference claim(s) because the examined application claim is either anticipated
by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140
F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29
USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.
1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422
F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163
USPQ 644 (CCPA 1969).
          A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d)
may be used to overcome an actual or provisional rejection based on a nonstatutory
double patenting ground provided the conflicting application or patent either is shown to
be commonly owned with this application, or claims an invention made as a result of
activities undertaken within the scope of a joint research agreement.
          Effective January 1, 1994, a registered attorney or agent of record may sign a
terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with
37 CFR 3.73(b).

7.   Claims 1-10 of Patent no. 6,622,168 contain each and every element of claims

21-31 of the instant application and as such anticipate claims 21-31 of the instant

application.

8.   "A later patent claim is not patentably distinct from an earlier patent claim if the

later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at

896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting

because the claims at issue were obvious over claims in four prior art patents); In re

Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of

obviousness-type double patenting where a patent application claim to a genus is

anticipated by a patent claim to a species within that genus)." ELI LILLY AND

COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the

Federal Court, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Treynor (USPN 5,822,759) in view of Wong et al. (USPN 5,909,695) (hereinafter

Wong).

10.   Referring to claim 11, Treynor discloses a method for caching a content element

(i.e. data) (e.g. abstract), the method comprising the steps of:

    receiving a content element retrieval request corresponding to the content

element (i.e. memory read request) (Figure 2, ref. 102; col. 5, lines 35-45);

sending a retrieval response, in response to the content element retrieval

request, the retrieval response indicating whether the content element resides in a

component cache (i.e. presence or absence of the requested data in the cache memory

is tested in a cache hit step; the cache sends a response to the cache manager

program 100 as to whether or not the data is within the cache) (Figure 2, ref. 104; col. 5,

lines 38-45);

receiving a content element insertion request corresponding to the content

element (i.e. insert_entry) (col. 5, lines 45-55; col. 6, line 36);

determining whether the content element should reside in the component cache

(i.e. if the cache is full, deleting the element with the lowest score) (col. 5, lines 55-67);

removing the content element from the component cache, in response to a

determination that the content element should not reside in the component cache (i.e.

delete the element with the lowest score) (col. 5, lines 55-67);

assocating the content element (i.e. data to be cached) with a content element

node (i.e. element in the linked list) and storing the content element (i.e. data 204) and

the content element node (i.e. CI 203) in the component cache, in response to a

determination that the content element should reside in the component cache (i.e. new

list segment 203' is added to the linked list 200 ...followed by actual copying of the

requested data into the cache memory 14) (col. 5, lines 55-67).

Treynor does not explicitly state sending an insertion response indicating

whether the content element was successfully inserted into the component cache, as

evidenced by lack of any variable receiving any response from the insert_entry(tmp,

*item) function call (col. 6, lines 30-35). In analogous art, Wong discloses another

method of caching a content element which includes sending an insertion response, in

response to the content element insertion request (i.e. insert element into cache)

indicating whether the content element was successfully inserted into the component

cache (i.e. Insert_cache_entry routine 607 returns to the calling routine with a return

code indicating that the operation was/was not successful) (col. 14, lines 10-27). It

would have been obvious to one of ordinary skill in the art to combine the teaching of

Wong with Treynor in order to ensure that the content element was successfully verified

to be inserted into the cache, and that the program did not hang or crash unexpectedly.

11.   Referring to claim 12, Treynor discloses the content element node comprises a

node ID (an inherent feature, otherwise the program would have no way to differentiate

one content element from the next) (i.e. code phrase 214), a content element (i.e.

pointer to data), and a pointer to the next node (i.e. next succeeding segment 203)

(Figure 7; col. 4, lines 30-67).

12.   Referring to claim 13, Treynor discloses the determination that the content

element should not reside in the cache is made by a content replacement manager (i.e.

cache replacement scheme according to the scores created) (col. 4, line 54 to col. 5,

line 12).

13.   Referring to claim 14, Treynor discloses the replacement manager determines

whether the element should reside in the cache by determining whether a seond

element should replace the content element (i.e. if the cache is full 112, and an element

should be inserted in the cache 108, then the last item in the list will be removed 114)

(e.g. abstract; col. 6, lines 15-48).

        Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Treynor

in view of Wong in view of Bereznyi et al. (USPN 6,453,404) (hereinafter Bereznyi).

14.   Treynor in view of Wong disclose the invention substantively as described in

claim 13. Treynor in view of Wong do not specifically disclose the replacement manger

determines whether the element should be deleted based on how recently the content

element has been referenced. In analogous art, Bereznyi discloses another cache

system which replaces elements based on how recently the element has been

referenced (i.e. utilize Least Recently Used listings to delete data items from the cache)

(col. 39, lines 58-63). It would have been obvious to one of ordinary skill in the art to

combine the teaching of Bereznyi with Treynor and Wong in order to provide a different

entry replacement scheme to Treynor-Wong, thereby customizing the system to suit the

users needs.

Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Treynor in view of Wong in view of Huberman et al. (USPN 6,085,216) (hereinafter

Huberman).

15.   Treynor-Wong disclose the invention substantively as described in claim 13.

Treynor-Wong do not specifically disclose the replacement manger determines whether

the element should be in the cache by whether the element is likely or unlikely to be

needed. In analogous art, Huberman discloses another cache management system

(col. 18, lines 38-40) which discloses determining whether the element should reside in

the component cache (i.e. allocate space within the cache) by determining whether the

element is likely or unlikely to be needed (i.e. based on previous collected statistics, the

expected value and variance for each element can be estimated, and using these

values, the cache can be efficiently allocated, such as deleting those entries which will

not be accessed, and keeping those which are likely to be accessed) (col. 18, lines 38-

54; col. 19, lines 40-58). It would have been obvious to one of ordinary skill in the art to

combine the teaching of Huberman with Treynor and Wong in order to provide a

different entry replacement scheme to Treynor-Wong, thereby customizing the system

to suit the users needs.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 21-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Malkin et al. (USPN 6,085,193) (hereinafter Malkin).

2.   Referring to claim 21, Malkin discloses a web page delivery system for dynamically generating a web page having at least one content element, the delivery system comprising:

a web/app server (proxy server) operative to receive a web page request from a user and to generate a web page and to deliver the web page to the user (col. 4, lines 45-55);

a preloader operative to receive a content element retrieval request from the web/app server and to deliver the at least one content element to the web/app server, in response to receiving the content element retrieval request (col. 17, line 49 to col. 18, line 23 and Figure 11);

a profile server operative to receive a hint request (prefetch hint information, or PHI) from the preloader and to deliver a hint to the preloader (col. 8, line 38 to col. 9, line 10 and Figure 3A);

wherein the preloader comprises a component cache and maintains the at least

one content element in the component cache and delivers the at least one content

element to the web server, in response to a determination that the hint indicates that the

at least one content element will be needed by the web/app server to generate the web

page (col. 8, line 38 to col. 9, line 10 and Figure 3A).

3.   Referring to claim 22, Malkin discloses the preloader is further operative to

receive a contenet element insertion request from the web/app server (proxy server)

and to service the request in response to receiving the content element insertion

request (col. 9, lines 3-10).

4.   Referring to claim 23, it is inherent that the system of Malkin comprises a cache

manager operative to receive the content element retrieval request and the content

element insertion request and to determine whether the at least one content element

resides in the component cache because it allows objects requesting devices the

knowledge if the content element resides in the cache memory.

5.   Referring to claim 4, Malkin discloses comprising a secondary web/app server

(proxy server) that is operative to send component insertion request to the cache

manager (col. 17, lines 22-48 and Figure 10).

6.   Referring to claim 25, Malkin discloses the preloader further comprises a cache

replacement manager operative to control a replacement policy of the component cache

(col. 8, lines 19-21; col. 16, lines 47-50).

7.   Referring to claim 26, Malkin discloses a method for delivering a web page, the

method comprising the steps of:

        receiving a web page request, the web page request corresponding to a web

page having at least one requested content element (col. 4, lines 45-55);

        determining whether a tagged content element resides in a component cache,

the tagged content element corresponding to the at least one requested content

element (col. 6, lines 3-14);

        generating a content response for each web page request, wherein the content

response includes the tagged content element if the tagged content element resides in

the component cache (Figure 11 and pertinent portions of the specification);

        generating the requested content element if the tagged content element does not

reside in the component cache (Figure 11, reference character 1125; col. 17, lines 59-

65);

        storing a content element node in the component cache, in response to a

determination that the tagged content element does not reside in the component cache,

the content element node corresponding to the generated content element (col. 9, lines

3-10); and

delivering the web page comprising the at least one requested content element

(col. 3, lines 15-40).

8.   Claim 27 is rejected for similar reasons as stated above.

9.   Referring to claim 28, Malkin discloses generating a hint request (PHI)

associated with the content element node, the hint request comprising the likelihood

that the requested content element will be needed by a future web page request (col.

10, lines 16-52; col. 11, lines 26-28).

10.   Referring to claim 29, Malkin discloses receiving a hint response associated with

the hint request, in response to the generation of the hint request (col. 8, line 56 to col.

9, line 10); and

        making a cache replacmement decision in response to receiving the hint

response (col. 15, line 64 to col. 16, line 9 and Figure 8).

11.   Referring to claim 30, Malkin discloses the decision indicates whether the

requested content element should be maintained in the component cache (col. 15, line

64 to col. 16, line 9 and Figure 8).

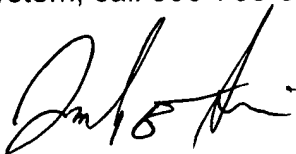12.   Claim 31 is rejected for similar reasons as stated above.

Conclusion

13.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph E. Avellino, Examiner
June 13, 2006